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AMENDMENT TO THE CLAIMS

Claims 12-34 are currently pending in the application.

Please amend claims 14, 15, 18, 19, 22, 23, 27, 28, 30, 31, 33, and 34 as shown below.

The following listing of claims 1-34 will replace all prior versions, and listings, of claims in the application:

1.-11. (Cancelled)

12. (Original) A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor as a function of an operating temperature of the damper;

generating a second operating current as a product of the first operating current and the scale factor; and

providing the second operating current to the damper to thereby control the damping force as a function of the desired force level of the damping force and the operating temperature of the damper.

13. (Original) A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper; and

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providing a second operating current to the damper in response to a determination of the scale factor and the offset value.

14. (Currently Amended) ~~The method of claim 13, further comprising:~~ A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper;

providing a second operating current to the damper in response to a determination of the scale factor and the offset value;

generating a third operating current as a product of the first operating current and the scale factor; and

generating the second operating current as a summation of the third operating current and the offset value.

15. (Currently Amended) ~~The method of claim 13, further comprising:~~ A method for controlling a damping force of a damper, said method comprising:

generating a first operating current as a function of a desired force level of the damping force;

determining a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper;

providing a second operating current to the damper in response to a determination of the scale factor and the offset value;

generating a third operating current as a summation of the first operating current and the offset value; and

generating the second operating current as a product of the third operating current and the scale factor.

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16. (Original) A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor as a function of an operating temperature of the damper and to generate a second operating current as a product of the first operating current and the scale factor,

wherein said second module is further operable to provide the second operating current to the damper to thereby control the damping force as a function of the desired force level of the damping force and the operating temperature of the damper.

17. (Original) A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper, said second module is further operable to provide a second operating current to the damper in response to a determination of the scale factor and the offset value.

18. (Currently Amended) ~~The device of claim 17, wherein~~ A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper,

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said second module is further operable to provide a second operating current to the damper in response to a determination of the scale factor and the offset value,

wherein said second module is further operable to generate a third operating current as a product of the first operating current and the scale factor, and

wherein said second module is further operable to generate the second operating current as a summation of the third operating current and the offset value.

19. (Currently Amended) ~~The device of claim 17, wherein~~ A device for controlling a damping force of a damper, said device comprising:

a first module operable to generate a first operating current as a function of a desired force level of the damping force; and

a second module operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper, said second module is further operable to provide a second operating current to the damper in response to a determination of the scale factor and the offset value,

wherein said second module is further operable to generate a third operating current as a summation of the first operating current and the offset value, and

wherein said second module is further operable to generate the second operating current as a product of the third operating current and the scale factor.

20. (Original) A system, comprising:

a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is operable to determine a scale factor as a function of an operating temperature of the damper,

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wherein said controller is operable to generate the first operating current as a product of the second operating current and the scale factor, and

wherein said controller is operable to provide the first operating current to the damper to thereby control the damping force as a function of the desired force level of the damping force and the operating temperature of the damper.

21. (Previously Amended) A system, comprising:

a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper, and

wherein said controller is operable to provide the first operating current to the damper in response to a determination of the scale factor and the offset value.

22. (Currently Amended) ~~The system of claim 21, wherein~~ A system, comprising:

a damper operable to provide a damping force in response to a reception of a first operating current; and

a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force,

wherein said controller is further operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper,

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wherein said controller is further operable to provide the first operating current to the damper in response to a determination of the scale factor and the offset value.

wherein said controller is further operable to generate a third operating current as a product of the second operating current and the scale factor, and

wherein said controller is further operable to generate the first operating current as a summation of the third operating current and the offset value.

23. (Currently Amended) ~~The system of claim 21, wherein~~ A system, comprising:
a damper operable to provide a damping force in response to a reception of a first operating current; and
a controller,

wherein said controller is operable to generate a second operating current as a function of a desired force level of the damping force.

wherein said controller is further operable to determine a scale factor and an offset value as a function of an operating temperature of the damper and a relative velocity of the damper.

wherein said controller is further operable to provide the first operating current to the damper in response to a determination of the scale factor and the offset value.

wherein said controller is further operable to generate a third operating current as a summation of the second operating current and the offset value, and

wherein said controller is further operable to generate the first operating current as a product of the third operating current and the scale factor.

24. (Previously Added) A system, comprising:
a damper operable to generate a damping force; and

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a controller including

a first module operable to generate a first operating current as a function of a desired force level of the damping force, and

a second module operable to determine a scale factor as a function of an operating temperature of said damper, said second module further operable to generate a second operating current as a product of the scale factor and the first operating current, wherein said controller is operable to communicate the second operating current to said damper.

25. (Previously Added) The system of claim 24, wherein said damper includes magnetorheological fluid.

26. (Previously Added) The system of claim 24, wherein said controller further includes a third module operable to generate a signal indicative of an ambient temperature of said damper.

27. (Currently Amended) The system of claim 24, wherein said controller ~~includes~~ further includes a third module operable to generate a signal indicative of a measured temperature of said damper.

28. (Currently Amended) The system of claim 24, wherein said controller ~~includes~~ further includes a third module operable to generate a signal indicative of a ~~measured~~ an estimated temperature of said damper.

29. (Previously Added) A system, comprising:
a damper operable to generate a damping force; and
a controller including

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a first module operable to generate a first operating current as a function of a desired force level of the damping force,

a second module operable to determine a set of scale factors and a set of offset values as a function of an operating temperature of said damper, and

a third module operable to determine a scale factor of the set of scale factors and an offset value of the set of offset values as a function of a relative velocity of said damper.

30. (Currently Amended) ~~The system of claim 29,~~ A system, comprising:

a damper operable to generate a damping force; and

a controller including

a first module operable to generate a first operating current as a function of a desired force level of the damping force,

a second module operable to determine a set of scale factors and a set of offset values as a function of an operating temperature of said damper,

a third module operable to determine a scale factor of the set of scale factors and an offset value of the set of offset values as a function of a relative velocity of said damper,

wherein said third module is further operable to generate a second operating current as a product of the scale factor and the first operating current;

wherein said third module is further operable to generate a third operating current as a summation of the offset value and the second operating current; and

wherein said controller is operable to communicate the third operating current to said damper.

31. (Currently Amended) ~~The system of claim 29,~~ A system, comprising:

a damper operable to generate a damping force; and

a controller including

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a first module operable to generate a first operating current as a function of a desired force level of the damping force,

a second module operable to determine a set of scale factors and a set of offset values as a function of an operating temperature of said damper,

a third module operable to determine a scale factor of the set of scale factors and an offset value of the set of offset values as a function of a relative velocity of said damper,

wherein said third module is further operable to generate a second operating current as a summation of the offset value and the first operating current;

wherein said third module is further operable to generate a third operating current as a product of the scale factor and the second operating current; and

wherein said controller is operable to communicate the third operating current to said damper.

32. (Previously Added) The system of claim 29, wherein said controller further includes a fourth module operable to generate a signal indicative of an ambient temperature of said damper.

33. (Currently Amended) The system of claim 29, wherein said controller includes further includes a fourth module operable to generate a signal indicative of a measured temperature of said damper.

34. (Currently Amended) The system of claim 29, wherein said controller includes further includes a fourth module operable to generate a signal indicative of a measured an estimated temperature of said damper.